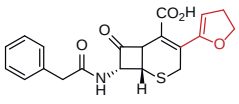
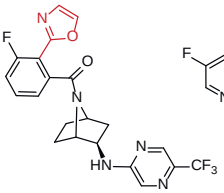
Stannanes for Drug Design

Introduction

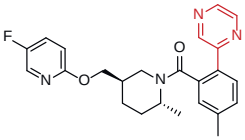
The Stille reaction has become one of the most powerful synthetic tools in organic chemistry. The Stille coupling as a versatile C-C bond forming reaction between stannanes and halides or pseudohalides, has very few limitations on the R-groups. Today, the Stille reaction constitutes a reliable and often-used method for the construction of carbocyclic and heterocyclic rings. Stannanes are stable and allow to prepare alternatives to unstable boronic acids or to be used in click chemistry.



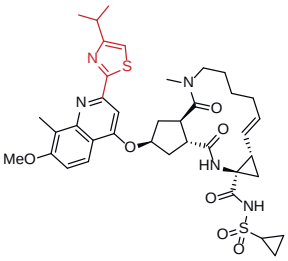
Antibacterial agent
US 1997/5635501
Pfizer



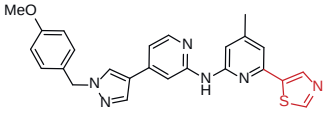
Modulator of orexin receptor
US 2016/46640
Johnson & Johnson



Antagonist of orexin receptor
WO 2008/147518
Merck & Co.

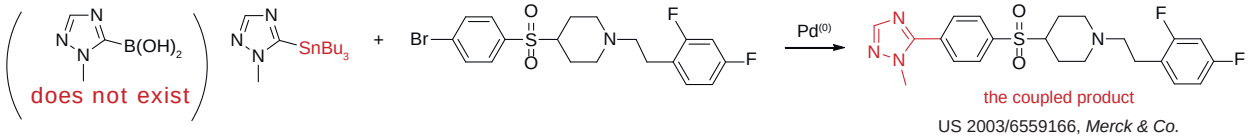


Simeprevir (TMC 435)
NS3/4A protein inhibitor
Janssen



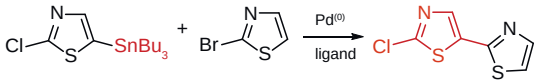
WO 2014/074422
Syk inhibitor
Merck & Co.

Advantages



US 2003/6559166, *Merck & Co.*

Reactivity

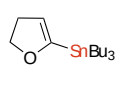


Synthesis of bithiazoles using Pd-catalyzed reactions in which Stille is superior to Negishi and Suzuki couplings.

Properties

- readily prepared, purified and stored;
- tolerate a wide variety of functional groups;
- require mild reaction conditions;
- not sensitive to moisture or oxygen;
- allow to prepare alternative compounds to unstable boronic acids

Our offer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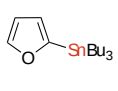
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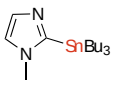
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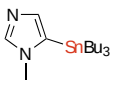
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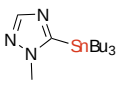
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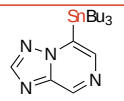
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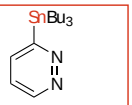
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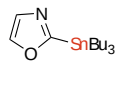
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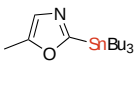
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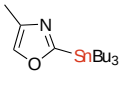
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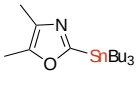
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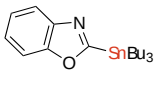
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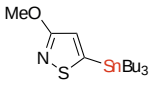
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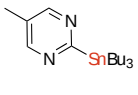
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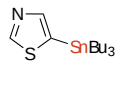
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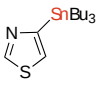
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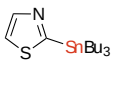
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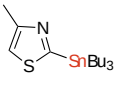
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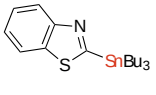
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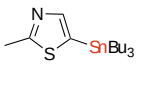
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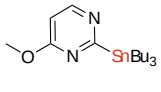
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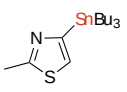
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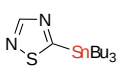
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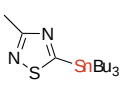
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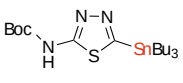
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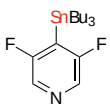
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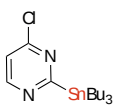
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References

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